

Vermont Mental Health Performance Indicator Project

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani
Monica Simon

DATE: May 11, 2001

RE: Hospitalization of VT Residents for Behavioral Health Care, 1990 - 1999

Penetration/utilization rates provide an important indicator of levels of access to health and mental health services. State hospital penetration/utilization rates are one of the core performance indicators for mental health systems of care for the CMHS Sixteen State Performance Indicator Project and for the NASMHPD President's Task Force on Performance Indicators. This indicator, however, is frequently criticized because it does not provide a complete picture of the utilization of inpatient behavioral health care services. In order to address that criticism, the Vermont Performance Indicator Project has obtained basic information on all episodes of behavioral health care in the Vermont State Hospital, the Veterans Hospital in White River Junction, Vermont, the Brattleboro Retreat (the state's only private psychiatric hospital), as well as general hospitals in Vermont, New Hampshire, and neighboring counties of New York State. The attached graphs and tables, from our forthcoming report on inpatient behavioral health care, provide an overview of the inpatient behavioral health care utilization rates for Vermont residents for ten calendar years: 1990 through 1999. Utilization rates are provided in terms of episodes of care, patient days, and numbers of people hospitalized. Because the data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to derive unduplicated counts of people served across facilities.

The first attached graph presents an overview of the volume of inpatient behavioral health care provided to Vermont residents during the period under examination. As you will see, there was very little change between 1999 and previously reported utilization levels. The number of episodes of care remained fairly steady for 1996 through 1999 after a substantial increase (29%) during 1992 through 1996. There was no change in the number of patient days for behavioral health care between 1998 and 1999 after a substantial decrease between 1990 and 1998 (34%). Finally, the number of Vermont residents hospitalized during 1996 through 1999 remained fairly constant after a moderate increase during 1992 through 1996 (16%).

The second page of graphs plot these three measures of utilization of inpatient care and the page of tables provide specific utilization rates detailed for each of five types of hospital. Over this ten-year period, there was a substantial increase in the number of

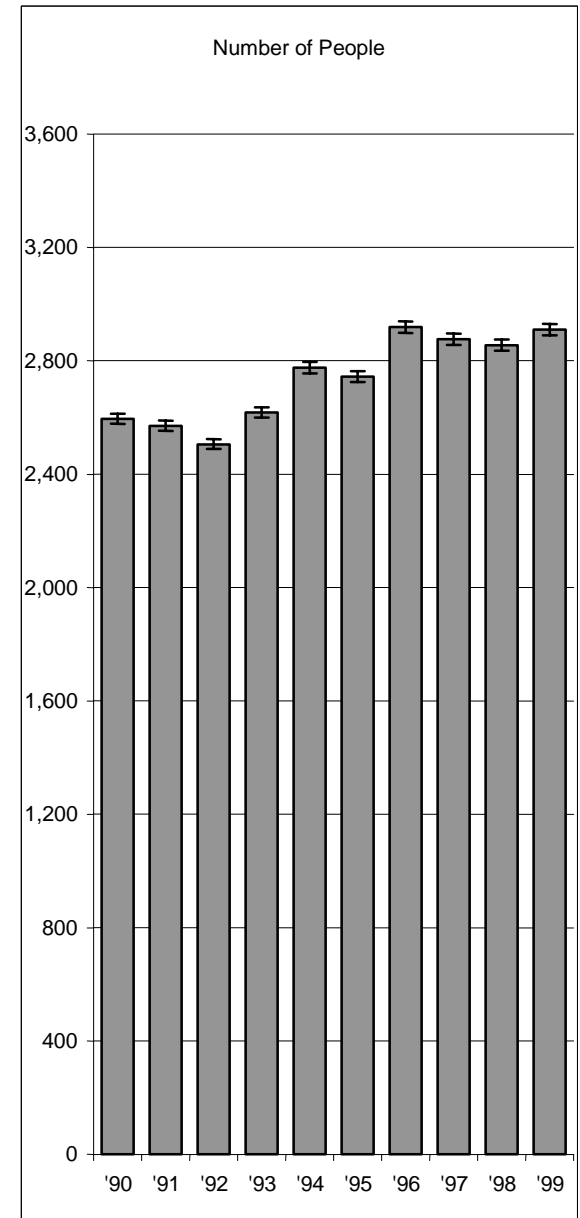
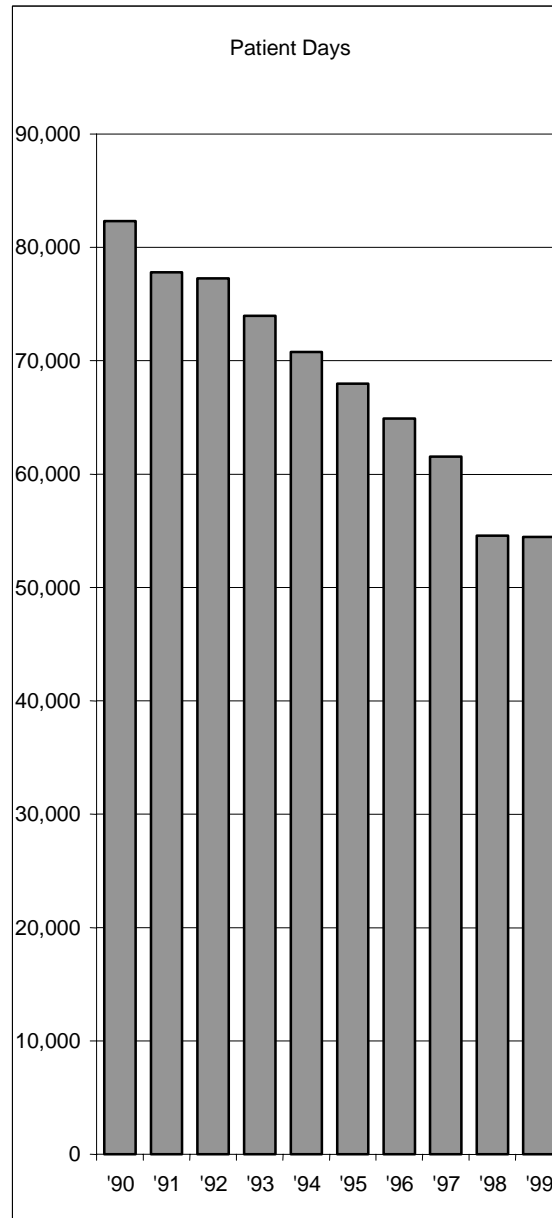
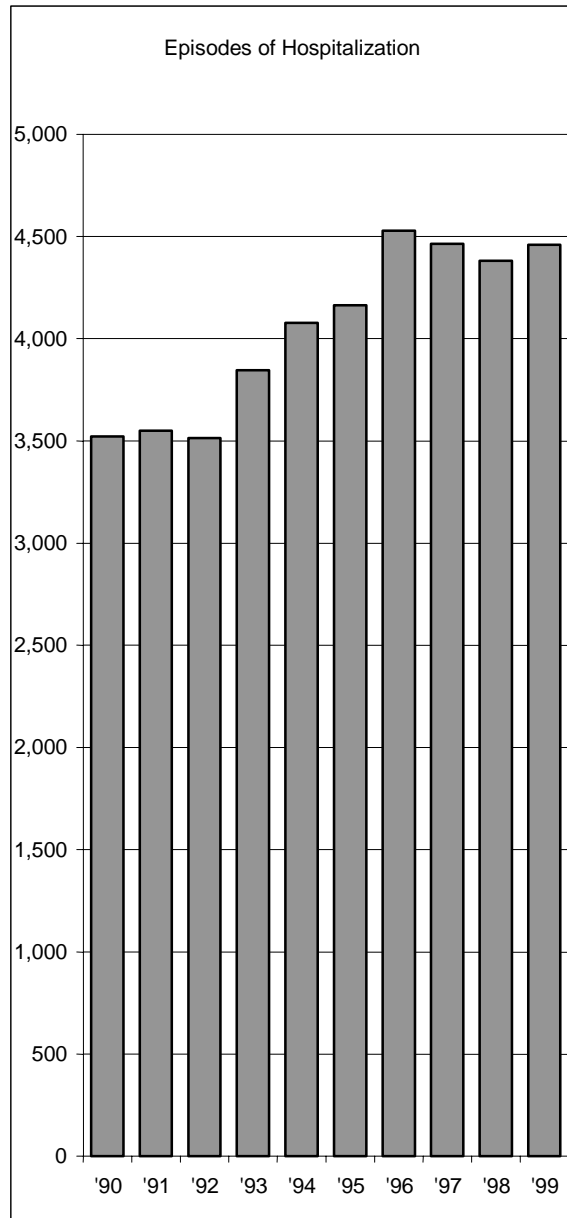
episodes of inpatient care in Vermont General Hospitals (+25%) and the Brattleboro Retreat (+215%) while the number of episodes in the Vermont State Hospital decreased substantially (-40%).

In terms of patient days, the Brattleboro Retreat had the only increase (+23%) while the Vermont State Hospital and the VA Hospital decreased by more than 50%, out-of-state patient days decreased by more than 40%, and Vermont General Hospitals decreased by 12% during 1990 through 1999. At the beginning of this period, Vermont State Hospital patient days were 80% higher than general hospital patient days. At the end of this period, Vermont State Hospital provided fewer patient days for behavioral health care than Vermont General Hospitals.

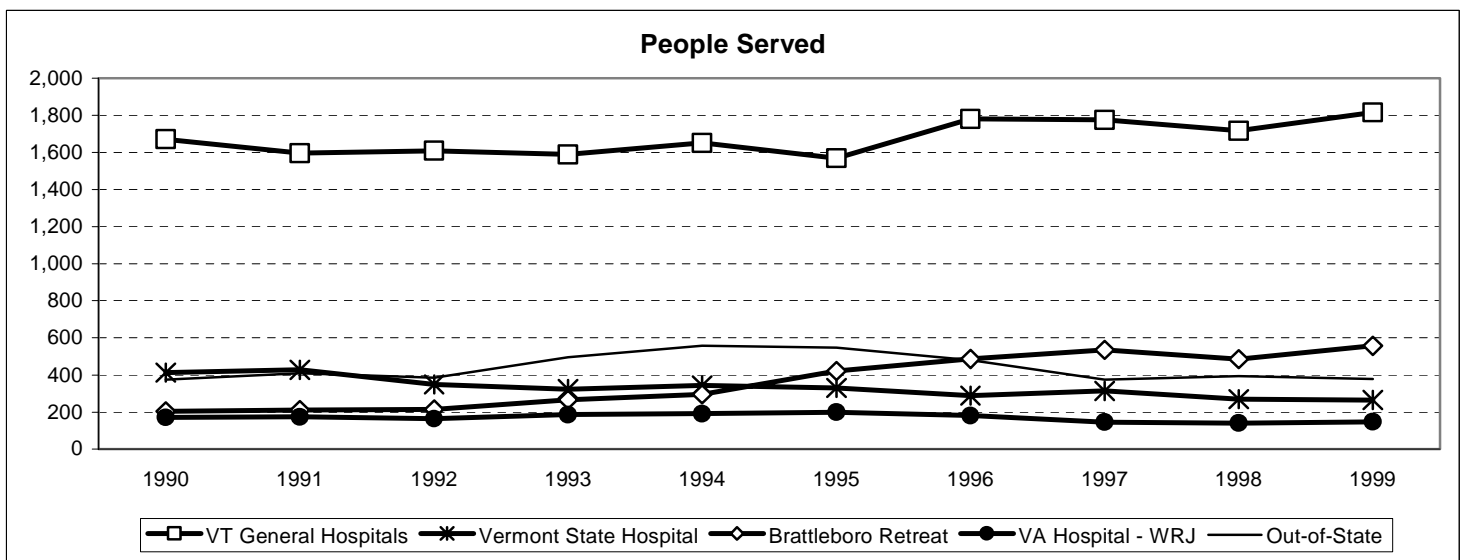
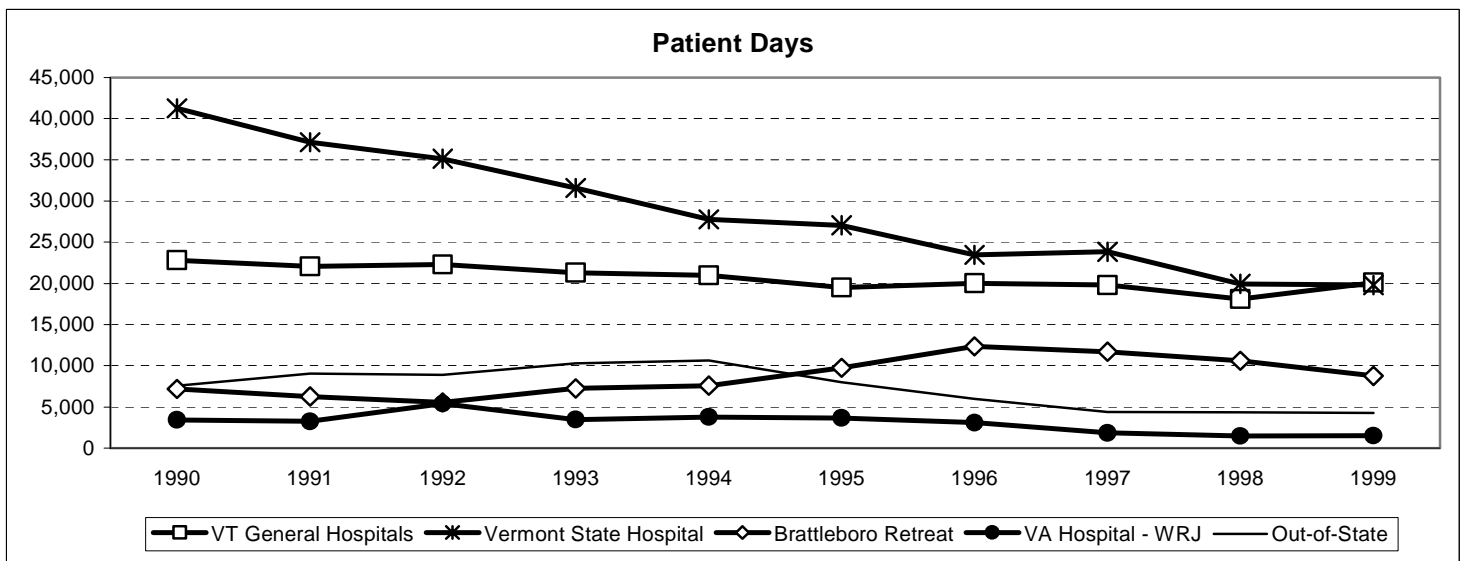
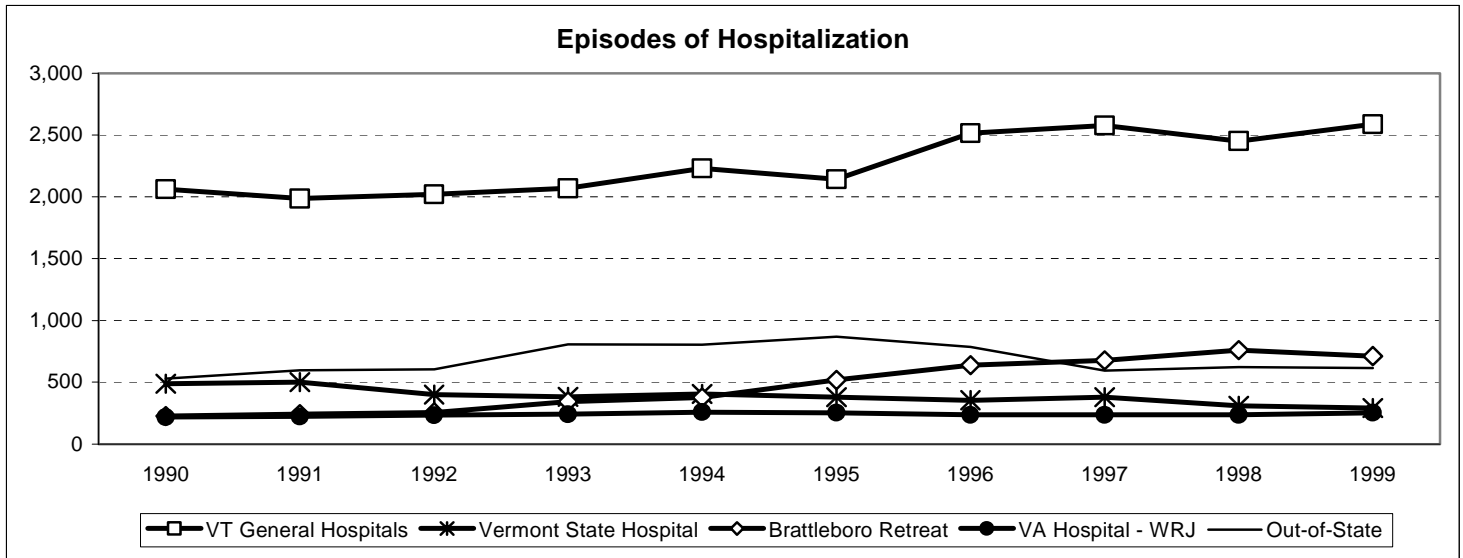
Finally, in terms of unduplicated numbers of people served, the Brattleboro Retreat more than doubled its client count while the other service sectors either remained about the same or served fewer people at the end of this period than at the beginning.

Over the weeks and months to come, we will be comparing these new inpatient data with data about people served by a number of other service sectors. We would be very interested in your suggestions for using these inpatient data to measure treatment outcomes. Please send your suggestions to jpandiani@ddmhs.state.vt.us or call 802-241-2638.

INPATIENT BEHAVIORAL HEALTH CARE SERVICES Provided To Vermont Residents During 1990 - 1999



INPATIENT BEHAVIORAL HEALTH CARE SERVICES BY HOSPITAL TYPE



INPATIENT BEHAVIORAL HEALTH CARE SERVICES

Provided To Vermont Residents During 1990 - 1999

Episodes of Hospitalization by Hospital Type

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	3,523	3,550	3,515	3,846	4,079	4,164	4,528	4,464	4,382	4,459
VT General Hospitals	2,060	1,986	2,020	2,069	2,231	2,142	2,514	2,576	2,451	2,586
Vermont State Hospital	488	501	401	382	405	381	354	380	309	293
Brattleboro Retreat	226	242	256	346	377	519	639	678	761	712
VA Hospital - WRJ	218	224	235	241	260	254	236	236	236	255
Out-of-State	531	597	603	808	806	868	785	594	625	613

Patient Days by Hospital Type

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	82,315	77,816	77,269	73,955	70,786	67,986	64,919	61,548	54,548	54,466
VT General Hospitals	22,835	22,066	22,287	21,291	20,962	19,498	20,034	19,781	18,114	20,102
Vermont State Hospital	41,265	37,143	35,130	31,602	27,778	27,059	23,452	23,827	19,961	19,815
Brattleboro Retreat	7,165	6,288	5,538	7,265	7,589	9,735	12,373	11,709	10,635	8,782
VA Hospital - WRJ	3,442	3,244	5,389	3,474	3,792	3,667	3,086	1,850	1,484	1,493
Out-of-State	7,608	9,075	8,925	10,323	10,665	8,027	5,974	4,381	4,354	4,274

Unduplicated Number of People Served by Hospital Type

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	2,596 ± 18	2,571 ± 18	2,506 ± 17	2,618 ± 18	2,776 ± 20	2,744 ± 19	2,919 ± 20	2,876 ± 20	2,855 ± 20	2,910 ± 20
VT General Hospitals	1,672 ± 12	1,596 ± 11	1,609 ± 12	1,589 ± 11	1,652 ± 12	1,568 ± 12	1,781 ± 13	1,775 ± 13	1,717 ± 12	1,816 ± 13
Vermont State Hospital	413	428	349	323	344	330	289	314	270	265
Brattleboro Retreat	204	212	215	267	296	421	486	536	485	557
VA Hospital - WRJ	171 ± 2	174 ± 2	164 ± 2	187 ± 2	192 ± 3	200 ± 3	182 ± 3	146 ± 2	141 ± 2	147 ± 2
Out-of-State	374 ± 3	410 ± 3	386 ± 3	495 ± 4	558 ± 5	546 ± 5	480 ± 4	374 ± 4	395 ± 3	379 ± 3